OS90
OS/3

#2

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ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/081,347

DATE: 05/21/2002
TIME: 14:22:46

Input Set : N:\Crf3\RULE60\10081347.raw
Output Set: N:\CRF3\05212002\J081347.raw

```
 1 <110> APPLICANT: Deisher, Theresa A.
 2         Conklin, Darrell C.
 3         Raymond, Fenella
 4         Bukowski, Thomas R.
 5         Holderman, Susan D.
 6         Hansen, Birgit
 7         Sheppard, Paul O.
 8 <120> TITLE OF INVENTION: NOVEL FGF HOMOLOGS
 9 <130> FILE REFERENCE: 96-20C1
10 <140> CURRENT APPLICATION NUMBER: 10/081,347
11 <141> CURRENT FILING DATE: 2002-02-21
13 <150> PRIOR APPLICATION NUMBER: US/09/229,947
14 <151> PRIOR FILING DATE: 1999-01-13
16 <160> NUMBER OF SEQ ID NOS: 43
17 <170> SOFTWARE: FastSEQ for Windows Version 3.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 917
21 <212> TYPE: DNA
22 <213> ORGANISM: Homo sapiens
23 <220> FEATURE:
24 <221> NAME/KEY: CDS
25 <222> LOCATION: (1)...(621)
26 <400> SEQUENCE: 1
27       atg tat tca gcg ccc tcc gcc tgc act tgc ctg tgt tta cac ttc ctg      48
28       Met Tyr Ser Ala Pro Ser Ala Cys Thr Cys Leu Cys Leu His Phe Leu
29        1               5                  10                  15
30       ctg ctg tgc ttc cag gta cag gtg ctg gtt gcc gag gag aac gtg gac      96
31       Leu Leu Cys Phe Gln Val Gln Val Leu Val Ala Glu Glu Asn Val Asp
32                      20                  25                  30
33       ttc cgc atc cac gtg gag aac cag acg cgg gct cgg gac gat gtg agc     144
34       Phe Arg Ile His Val Glu Asn Gln Thr Arg Ala Arg Asp Asp Val Ser
35                  35                  40                  45
36       cgt aag cag ctg cgg ctg tac cag ctc tac agc cgg acc agt ggg aaa     192
37       Arg Lys Gln Leu Arg Leu Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys
38              50                  55                  60
39       cac atc cag gtc ctg ggc cgc agg atc agt gcc cgc ggc gag gat ggg     240
40       His Ile Gln Val Leu Gly Arg Arg Ile Ser Ala Arg Gly Glu Asp Gly
41        65                  70                  75                  80
42       gac aag tat gcc cag ctc cta gtg gag aca gac acc ttc ggt agt caa     288
43       Asp Lys Tyr Ala Gln Leu Leu Val Glu Thr Asp Thr Phe Gly Ser Gln
44                      85                  90                  95
45       gtc cgg atc aag ggc aag gag acg gaa ttc tac ctg tgc atg aac cgc     336
46       Val Arg Ile Lys Gly Lys Glu Thr Glu Phe Tyr Leu Cys Met Asn Arg
```

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```
47                    100                 105                 110
48      aaa ggc aag ctc gtg ggg aag ccc gat ggc acc agc aag gag tgt gtg    384
49      Lys Gly Lys Leu Val Gly Lys Pro Asp Gly Thr Ser Lys Glu Cys Val
50          115                 120                 125
51      ttc atc gag aag gtt ctg gag aac aac tac acg gcc ctg atg tcg gct    432
52      Phe Ile Glu Lys Val Leu Glu Asn Asn Tyr Thr Ala Leu Met Ser Ala
53          130                 135                 140
54      aag tac tcc ggc tgg tac gtg ggc ttc acc aag aag ggg cgg ccg cgg    480
55      Lys Tyr Ser Gly Trp Tyr Val Gly Phe Thr Lys Lys Gly Arg Pro Arg
56          145                 150                 155                 160
57      aag ggc ccc aag acc cgg gag aac cag cag gac gtg cat ttc atg aag    528
58      Lys Gly Pro Lys Thr Arg Glu Asn Gln Gln Asp Val His Phe Met Lys
59                          165                 170                 175
60      cgc tac ccc aag ggg cag ccg gag ctt cag aag ccc ttc aag tac acg    576
61      Arg Tyr Pro Lys Gly Gln Pro Glu Leu Gln Lys Pro Phe Lys Tyr Thr
62                          180                 185                 190
63      acg gtg acc aag agg tcc cgt cgg atc cgg ccc aca cac cct gcc        621
64      Thr Val Thr Lys Arg Ser Arg Arg Ile Arg Pro Thr His Pro Ala
65                          195                 200                 205
66      taggccaccc cgccgcggcc ctcaggtcgc cctggccaca ctcacactcc cagaaaactg    681
67      catcagagga atattttttac atgaaaaata aggattttat tgttgacttg aaaccccccga   741
68      tgacaaaaga ctcacgcaaa gggactgtag tcaacccaca ggtgcttgtc tctctctagg    801
69      aacagacaac tctaaactcg tccccagagg aggacttgaa tgaggaaacc aacactttga    861
70      gaaaccaaag tccttttttcc caaaggttct gaaaaaaaaa aaaaaaaaaa ctcgag       917
72 <210> SEQ ID NO: 2
73 <211> LENGTH: 207
74 <212> TYPE: PRT
75 <213> ORGANISM: Homo sapiens
76 <400> SEQUENCE: 2
77      Met Tyr Ser Ala Pro Ser Ala Cys Thr Cys Leu Cys Leu His Phe Leu
78          1               5                   10                  15
79      Leu Leu Cys Phe Gln Val Gln Val Leu Val Ala Glu Glu Asn Val Asp
80                          20                  25                  30
81      Phe Arg Ile His Val Glu Asn Gln Thr Arg Ala Arg Asp Asp Val Ser
82                          35                  40                  45
83      Arg Lys Gln Leu Arg Leu Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys
84              50                  55                  60
85      His Ile Gln Val Leu Gly Arg Arg Ile Ser Ala Arg Gly Glu Asp Gly
86          65                  70                  75                  80
87      Asp Lys Tyr Ala Gln Leu Leu Val Glu Thr Asp Thr Phe Gly Ser Gln
88                          85                  90                  95
89      Val Arg Ile Lys Gly Lys Glu Thr Glu Phe Tyr Leu Cys Met Asn Arg
90                          100                 105                 110
91      Lys Gly Lys Leu Val Gly Lys Pro Asp Gly Thr Ser Lys Glu Cys Val
92                          115                 120                 125
93      Phe Ile Glu Lys Val Leu Glu Asn Asn Tyr Thr Ala Leu Met Ser Ala
94                          130                 135                 140
95      Lys Tyr Ser Gly Trp Tyr Val Gly Phe Thr Lys Lys Gly Arg Pro Arg
96          145                 150                 155                 160
```

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Input Set : N:\Crf3\RULE60\10081347.raw
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```
 97          Lys Gly Pro Lys Thr Arg Glu Asn Gln Gln Asp Val His Phe Met Lys
 98                          165                 170                 175
 99          Arg Tyr Pro Lys Gly Gln Pro Glu Leu Gln Lys Pro Phe Lys Tyr Thr
100                          180                 185                 190
101            Thr Val Thr Lys Arg Ser Arg Arg Ile Arg Pro Thr His Pro Ala
102                          195                 200                 205
104 <210> SEQ ID NO: 3
105 <211> LENGTH: 24
106 <212> TYPE: DNA
107 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
109 <223> OTHER INFORMATION: oligonucleotide primer ZC11676
110 <400> SEQUENCE: 3
111      ggacttgact accgaaggtg tctg                                          24
113 <210> SEQ ID NO: 4
114 <211> LENGTH: 23
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: oligonucleotide primer ZC11677
119 <400> SEQUENCE: 4
120      gtcgatgtga gccgtaagca gct                                           23
122 <210> SEQ ID NO: 5
123 <211> LENGTH: 26
124 <212> TYPE: DNA
125 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: oligonucleotide primer ZC12053
128 <400> SEQUENCE: 5
129      gcatacttgt ccccatcctc gccgcg                                        26
131 <210> SEQ ID NO: 6
132 <211> LENGTH: 621
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: degenerate sequence
137 <220> FEATURE:
138 <221> NAME/KEY: variation
139 <222> LOCATION: (1)...(621)
140 <223> OTHER INFORMATION: n is any nucleotide
141 <400> SEQUENCE: 6
W--> 142  atgtaywsng cnccnwsngc ntgyacntgy ytntgyytnc ayttyytnyt nytntgytty      60
W--> 143  cargtncarg tnytngtngc ngargaraay gtngayttym gnathgaygt ngaraarcar     120
W--> 144  acnmgngcnm gngaygaygt nwsnmgnaar carytnmgny tntaycaryt ntaywsnmgn     180
W--> 145  acnwsnggna arcayathca rgtnytnggn mgnmgnathw sngcnmgngg ngargayggn     240
W--> 146  gayaartayg cncarytnyt ngtngaracn gayacnttyg gnwsncargt nmgnathaar     300
W--> 147  ggnaargara cngarttyta yytntgyatg aaymgnaarg gnaarytngt nggnaarccn     360
W--> 148  gayggnacnw snaargartg ygtnttyath garaargtny tngaraayaa ytayacngcn     420
W--> 149  ytnatgwsng cnaartayws nggntggtay gtnggnttya cnaaraargg nmgnccnmgn     480
```

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Input Set : N:\Crf3\RULE60\10081347.raw
Output Set: N:\CRF3\05212002\J081347.raw

```
W--> 150        aarggnccna aracnmgnga raaycarcar gaygtncayt tyatgaarmg ntayccnaar        540
W--> 151        ggncarccng arytncaraa rccnttyaar tayacnacng tnacnaarmg nwsnmgnmgn        600
W--> 152        athmgnccna cncayccngc n                                                  621
     154 <210> SEQ ID NO: 7
     155 <211> LENGTH: 47
     156 <212> TYPE: DNA
     157 <213> ORGANISM: Artificial Sequence
     158 <220> FEATURE:
     159 <223> OTHER INFORMATION: oligonucleotide primer ZC12652
     160 <400> SEQUENCE: 7
     161        tatttatcta gactggttcc gcgtgccgcc gaggagaacg tggactt                     47
     163 <210> SEQ ID NO: 8
     164 <211> LENGTH: 33
     165 <212> TYPE: DNA
     166 <213> ORGANISM: Artificial Sequence
     167 <220> FEATURE:
     168 <223> OTHER INFORMATION: oligonucleotide primer ZC12631
     169 <400> SEQUENCE: 8
     170        gtatttgtcg actcaggcag ggtgtgtggg ccg                                    33
     172 <210> SEQ ID NO: 9
     173 <211> LENGTH: 22
     174 <212> TYPE: DNA
     175 <213> ORGANISM: Artificial Sequence
     176 <220> FEATURE:
     177 <223> OTHER INFORMATION: oligonucleotide primer ZC15290
     178 <400> SEQUENCE: 9
     179        gccgaggaga acgtggactt cc                                                22
     181 <210> SEQ ID NO: 10
     182 <211> LENGTH: 47
     183 <212> TYPE: DNA
     184 <213> ORGANISM: Artificial Sequence
     185 <220> FEATURE:
     186 <223> OTHER INFORMATION: oligonucleotide primer ZC15270
     187 <400> SEQUENCE: 10
     188        tatttatcta gagatgacga tgacaaggcc gaggagaacg tggactt                     47
     190 <210> SEQ ID NO: 11
     191 <211> LENGTH: 41
     192 <212> TYPE: DNA
     193 <213> ORGANISM: Artificial Sequence
     194 <220> FEATURE:
     195 <223> OTHER INFORMATION: oligonucleotide primer ZC13497
     196 <400> SEQUENCE: 11
     197        agcattgcta aagaagaagg tgtaagcttg gacaagagag a                           41
     199 <210> SEQ ID NO: 12
     200 <211> LENGTH: 63
     201 <212> TYPE: DNA
     202 <213> ORGANISM: Artificial Sequence
     203 <220> FEATURE:
     204 <223> OTHER INFORMATION: oligonucleotide primer ZC15131
```

```
205 <400> SEQUENCE: 12
206      ggtgtaagct tggacaagag agaggagaac gtggacttcc gcatccacgt ggagaaccag      60
207      acg                                                                    63
209 <210> SEQ ID NO: 13
210 <211> LENGTH: 39
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: oligonucleotide primer ZC15134
215 <400> SEQUENCE: 13
216      ccggctgtag agctggtaca gccgcagctg cttacggct                             39
218 <210> SEQ ID NO: 14
219 <211> LENGTH: 42
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: oligonucleotide primer ZC13529
224 <400> SEQUENCE: 14
225      cttcagaagc ccttcaagta cacgacggtg accaagaggt cc                         42
227 <210> SEQ ID NO: 15
228 <211> LENGTH: 61
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: oligonucleotide primer ZC13525
233 <400> SEQUENCE: 15
234      acgacggtga ccaagaggtc ccgtcggatc cggcccacac accctgccta gggggaattc      60
235      g                                                                      61
237 <210> SEQ ID NO: 16
238 <211> LENGTH: 61
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: oligonucleotide primer ZC13526
243 <400> SEQUENCE: 16
244      caaacaggca gccctagaat actagtgtcg actcgaggat ccgaattccc cctaggcagg      60
245      g                                                                      61
247 <210> SEQ ID NO: 17
248 <211> LENGTH: 44
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: oligonucleotide primer ZC13528
253 <400> SEQUENCE: 17
254      ctcaaaaatt ataaaaatat ccaaacaggc agccctagaa tact                       44
256 <210> SEQ ID NO: 18
257 <211> LENGTH: 186
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial Sequence
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 05/21/2002
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Please Note:
**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.**

Seq#:6; N Pos. 9,12,15,18,21,27,33,39,48,51,54,66,72,75,78,81,93,102,111
Seq#:6; N Pos. 123,126,129,132,141,144,147,156,159,162,171,177,180,183,186
Seq#:6; N Pos. 189,204,207,210,213,216,222,225,228,231,240,252,258,261,264
Seq#:6; N Pos. 270,276,282,285,291,294,303,312,324,336,342,348,351,354,360
Seq#:6; N Pos. 366,369,372,384,399,402,417,420,423,429,432,441,444,453,456
Seq#:6; N Pos. 462,471,474,477,480,486,489,495,498,516,531,537,543,549,555
Seq#:6; N Pos. 564,576,579,582,585,591,594,597,600,606,609,612,618,621
Seq#:36; Xaa Pos. 2,4
Seq#:37; Xaa Pos. 2,3

VERIFICATION SUMMARY   DATE: 05/21/2002
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```
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:60
L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:120
L:145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:180
L:146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:240
L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:300
L:148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:360
L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:420
L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:480
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:540
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:600
L:801 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
L:815 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
```